

## **7000 HAZARDOUS MATERIALS**

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## **7100 HAZARDOUS MATERIALS**

### **7110 Introduction**

The Hazardous Materials section outlines the jurisdictional boundaries of hazardous materials (HAZMAT) incident response between federal, state, and local agencies, outlines locally available response assets and contains scenarios based on potential real world incidents.

### **7115 Background Information**

The Hazardous Materials section was developed in accordance with the requirements of Title 33, United States Code, Section 1321(j)(1) and the National Oil and Hazardous Substances Pollution Contingency Plan.

This section was developed with input from representatives from the Federal, State, and local agencies that would likely be involved in the abatement of a hazardous substance release or substantial threat of a release. Coordinated planning was required to ensure an effective, cooperative response be initiated in the event of an actual incident.

### **7120 Governmental Policy & Response**

The response systems for governmental agencies are based on each agency capabilities, responsibilities, response strengths and authorities. The following sections describe the response actions for Federal, State, and local agencies.

#### **7130 Federal Policy**

In accordance with section 311 (c) of the Clean Water Act (CWA), as amended by the Oil Pollution Control Act of 1990, the On-Scene Coordinator (OSC) is delegated authority to ensure the effective and immediate removal of a discharge and mitigation or prevention of a substantial threat of discharge of a hazardous substance.

The Coast Guard provides the OSC for oil discharges and hazardous substance release into or threatening the coastal zone. Environmental Protection Agency provides OSCs for oil discharges and hazardous substance releases into or threatening the inland zone. The boundaries between the Coast Guard and EPA zones can be found in section 7100. This section outlines the response policies of the Coast Guard.

Based on section 300.135(d) of the NCP, the United States Coast Guard Captain of the Port (COTP) has been designated the local hazardous materials response team to be the initial responder to incidents in the coastal zone. The COTP will remain the OSC and make notifications to the NRC and assist in the coordination of response efforts, if required. If the incident is beyond the capabilities of local responders, the COTP/OSC WILL exercise the ACP and will initiate the formation of the Incident Command System. Based upon the Memorandum of Agreement between the USCG COTP and the County of San Diego Hazardous Incident Response Team (HIRT), The OSC will request the Teams assistance.

For releases exceeding the capabilities of HIRT, the OSC will request other Federal resources. The OSC may request the assistance of the:

- a) National Strike Force (NSF), including the three USCG Strike Teams, the Public Information Assist Team (PIAT), and the National Strike Force Coordination Center (NSFCC).

The NSF can provide the OSC with:

- 1) Technical assistance, equipment and other resources to augment the OSC staff.
- 2) Assistance in coordinating the use of private and public resources.
- 3) Assistance in locating spill response resources using the NSFCC'S national and international computerized inventory of spill response equipment.
- 4) Provide PIAT to assist the OSC with the demands for public information.

b) The NOAA Scientific Support Coordinator (SSC). The SSC can provide the OSC with:

- 1) Information regarding the released chemical(s), including chemical properties, response techniques, health and safety issues, and protective equipment required.
- 2) Chemical plume trajectory modeling. Based on the information derived from this modeling, the SSC can provide information on concentration ranges, exposure levels, and protective actions.
- 3) Current on-site weather conditions.
- 4) Forecasting of expected weather changes and the resulting effects on the plume model.
- 5) Information on resources at risk.
- 6) Assistance with air monitoring issues.

c) Coast Guard Activities San Diego. Local Coast Guard resources that could be requested by the OSC are:

- 1) Two 41' SAR/Firefighting boats.
- 2) Three 110' patrol boat (San Diego Harbor-USCGC Tybee, Edisto, Long Island).
- 3) Three HH60J Helicopters.
- 4) Two 378' Cutters (CGC Hamilton, Chase)

d) Federal Fire Department Hazardous Materials Response Teams. There are two such teams in the San Diego area. These teams are located at the 32<sup>nd</sup> Street Naval Station and Naval Air Station North Island. These teams can provide the OSC with:

- 1) ICS Command Center representative who can assess U. S. Navy resources.
- 2) State of California certified HazMat technicians and/or specialists.
- 3) Two response units which are fully equipped with state of the art monitoring and sampling equipment as well as Computer Data Bases to aid in identification and hazard assessment.
- 4) The response units are fully equipped with personnel protective equipment in order to perform all levels of entry (level D through level A).
- 5) Decontamination equipment is carried giving the technicians the ability to set up the most elaborate decontamination site(s).
- 6) Equipment and agents are carried on the vehicles to contain, control, absorb, and neutralize most common and exotic chemical spills.
- 7) A cascade system in order to recharge air bottles.
- 8) A Light and Air vehicle (located at 32<sup>nd</sup> Street Naval Station). This tractor-trailer is equipped to respond to larger incidents where more equipment and materials could be required. Larger quantities of containment, absorption, and neutralization materials are carried on this apparatus on pallets. The Light and Air Unit contains the following equipment:

- a) A 6.0 Kilowatt generator with telescoping light fixtures.
- b) 700 gallons of AFFF.

- c) An air compressor and charging system.
  - d) A bobcat tractor that can be utilized to move pallets or equipment, or to dig dikes and construct dams for the containment of hazardous materials.
- 
- 9) An inflatable Command Center Tent.
  - 10) A test bed for communications. This unit allows all units to communicate with each other via a patch through the system.
  - 11) Access to Firefighting equipment including crash trucks with AFFF and an AFFF Resupply vehicle (800 gallons of AFFF concentrate).
  - 12) Access to 6 contract tugs with Firefighting/AFFF capacities. These tugs have two monitors per tug, which have a capacity of supplying 3000 G.P.M. of water/AFFF.
  - 13) Access to two U.S. Navy tugs that have a capacity of 1500 G.P.M. of water/AFFF.
  - 14) Access to AFFF stored on U.S. Naval vessels in San Diego.
  - 15) Access to the Naval Supervisor of Salvage resources.

For releases of hazardous substances, pollutants, or contaminants, when the release is on, or the sole source of the release is from any facility or vessel under the jurisdiction, custody or control of the Department of Defense (DOD), the agency is responsible for designating the OSC. In the San Diego area, Commander Naval Base San Diego is designated as the OSC for the Naval Facilities. The Coast Guard COTP will coordinate with the Commander Naval Base and provide assistance as requested.

#### **7140 State Policy**

The States main role in any HazMat incident is to assist local government, and take part in the unified command as appropriate. Certain resources exist at the State level, and if requested can be made available to assist Federal and local responders in a marine HAZMAT incident.

In California the primary State agencies that will assist the incident responders are the following:

**Department of Fish & Game (DFG)** - DFG, as a state trustee for fish and wildlife, is the lead state authority for any off-highway spill. The Department serves as the State Agency Coordinator, the primary contact between the Unified Command and the participating state agencies. If the incident exceeds the capabilities of local response agencies, the Department may assume the Incident Commander role. The Department can provide recommendations for containment and cleanup operations, determine cleanup completion when fish, wildlife, or their habitat are threatened, conduct investigations and collect evidence for civil or criminal prosecution.

**Department of Toxic Substances Control (DTSC)** - DTSC, as a part of California's Environmental Protection Agency (Cal EPA), DTSC has expertise handling and responding to situations involving hazardous materials. DTSC can provide recommendations on the course of action for cleanup, environmental risk, breakdown products, and determine both the short and long-term fate and effects of the product on the environment.

**California Highway Patrol (CHP)** - CHP will function as the State Agency Coordinator or Incident Commander for a hazardous materials incident which occurs on a highway or its right-of-way within CHP jurisdiction (freeways, highways, and roads in unincorporated areas). CHP can provide technical expertise regarding commercial vehicle equipment regulations and hazardous material transportation provisions. CHP has authority to conduct investigations and collect evidence for criminal or civil prosecution.

**Department of Transportation (CALTRANS)** - CALTRANS is responsible for maintaining the state highway system. They maintain contracts with cleanup companies statewide to provide cleanup on highways; however, response is limited to the highway and right-of-way area only.

**Department of Forestry and Fire Protection (CDF)** - CDF, in addition to carrying out the responsibilities of a local fire suppression agency during a hazardous materials incident, they can provide logistical and communications support to a Unified Command as well as emergency feeding operations for large numbers. The California State Fire Marshal is also a part of this department. Their Pipeline Safety Division publishes the *Guide to Hazardous Liquid Pipeline Operators* to provide general information regarding the location and phone numbers of hazardous liquid pipeline operators to fire services. Pipeline rupture, fire, or explosions must be reported to California OES at 800-852-7550, who will relay the information to the State Fire Marshal.

**Regional Air and Water Boards** - are both a part of Cal EPA and have jurisdiction for air and water quality in their respective areas.

HAZMAT responses will be conducted under the auspices of the California Standardized Emergency Management System (SEMS) (Chapter 1, Division 2, Title 19, California Code of Regulations). SEMS defines the principles of the Incident-Command System, incident resources and facilities, and common responsibilities. The key components of SEMS are:

- 1) Five levels of emergency management will be used state wide to create uniform organization and terminology. The five levels are field/incident, local government, operational area, region, and state.
- 2) Five standard functions of the emergency response organization at all levels will be used. The five levels are command/management, operations, plans/intelligence, logistics, and a finance/administration.
- 3) The Operational Area (county) will be the central coordination point for information and resources at a major local incident.
- 4) A statewide master mutual-aid system exists for coordination of operational area, regional, and state resources during major emergencies.
- 5) An Operational Area Satellite Information System (OASIS) can be used to link all operational area and OES via satellite communications.
- 6) All state and local agencies must use SEMS during disaster responses and it is an eligibility requirement for local governments and agencies to receive state reimbursement following a disaster.
- 7) SEMS guidelines and information on an approved course of instruction are available from state OES.

## **7150 Local Governmental Policy**

Pursuant to the California Health and Safety Code Chapter 6.95, local governments have developed local area plans documenting policies and procedures for responding to HazMat incidents. It is anticipated that local responders will be the first to arrive on-scene.

The main responsibilities of the response agencies are to rescue and treat victims, perform fire suppression, isolate contaminated areas from the general public, control and contain hazardous materials, and facilitate any public evacuations or shelter-in-place operations.

For most HazMat emergencies, local-government responders will be on scene first at an incident within their jurisdiction. Generally, in any HazMat incident, assisting agencies will respond from three functional areas:

- 1) Fire Services - Certain fire departments have established a HazMat response team whose organizational structure will provide the necessary supervision and control for the essential functions required at HazMat incident as well as fire suppression capabilities.
- 2) Law Enforcement - The local law-enforcement agency will respond to most HazMat incidents. Law enforcement agencies may assist the On-scene Coordinator by isolating the incident area, managing crowd control, traffic control, providing protective public action, such as evacuations or sheltering-in-place, and managing criminal investigations.
- 3) Environmental Health Agencies - In most cases, the local or state environmental health agency will be at the scene. These agencies will assist in determining the nature and identity of the hazardous material, establishing the criteria for cleanup and disposal of the material, declaring the site safe for reentry by the public, providing the medical history of exposed individuals, monitoring the surrounding environment, assisting in the cleanup of the site, and providing technical advice.

### **Responses to Hazardous Materials Incidents Within the San Diego Operational Area**

The Hazardous Materials (HAZMAT) Incident Response Team (HIRT) is a program of the Unified San Diego County Emergency Services Organization. It is a regional program intended to respond to all hazardous materials incidents within the San Diego Operational Area. The HIRT consists of responders from the San Diego Fire Department Hazardous Materials Unit as well as representatives from the San Diego County Department of Environmental Health (DEH) Hazardous Materials Division (HMD).

A typical HIRT response will be provided by one hazmat vehicle from San Diego Fire with four (4) hazardous materials specialists and one hazmat vehicle from HMD with two (2) additional specialists. In this configuration the team is able to effectively respond to any Hazmat incident up to, and including, large spills requiring level "A" entry.

When a HIRT Unit is requested and dispatched (normally through San Diego Fire dispatch) to the scene of a Hazmat emergency, that unit automatically becomes a resource of the Incident Commander. It must be remembered that HIRT will never assume Incident Command responsibility. HIRT is a resource for the Incident Commander (IC) and will assist and advise to the best of their ability.

The minimum standards for HIRT are as follows:

#### **I. TRAINING STANDARDS**

All HIRT providers will:

- 1) Be trained to NFPA standards.

- 2) Meet all operational requirements of CCR Title 8 Section 5192 and 29 CFR 1910.120
- 3) Be trained to perform entry in both level “A” and level “B” protective equipment.

## **II. OPERATING STANDARDS**

### **A. Mitigation/Control Capabilities**

HIRT will:

- 1) Respond to reported incidents and advise the Incident Commander (IC) on additional local, state, federal and private resources required to manage and/or mitigate the problem.
- 2) Perform technical response procedures in accordance with established standard operating procedures (SOPs), personal protection guidelines and all applicable State regulations.
- 3) Request use of the State of California Emergency Reserve Account (ERA) for emergency cleanup.
- 4) Provide technical expertise, assistance and equipment at the incident.
- 5) Perform duties as directed by the IC.
- 6) Act as the IC's agent in the management of cleanup operations.

### **B. Public Health and Safety Capabilities**

HIRT will be able to:

- 1) Identify, or assist in the identification of, unknown spilled material at the scene.
- 2) Act as technical advisor on characteristics and direct health and environmental effects of the hazardous materials at the scene.
- 3) Assist the IC in determining the necessity for evacuation and establishing reentry criteria.
- 4) Sample contaminated soil, water or air to determine the extent of contamination and identify any public health concerns.
- 5) Provide analytical laboratory support as needed.
- 6) Assist the IC in identifying potential sources of hazardous materials release.
- 7) Provide information on proper protective actions at the scene.
- 8) Recommend cleanup levels and advise on the adequacy of cleanup both during and after the emergency.
- 9) Assist the IC in obtaining financial and other resources necessary for any required cleanup.

- 10) Assist the agency having jurisdiction in obtaining appropriate enforcement action against any responsible party.
- 11) Provide on-scene liaison with Poison Control, Emergency Medical Services (EMS) and State and Federal Agencies.

**C. Capabilities Required of All Providers**

The HIRT will be able to perform the following functions:

- 1) Understand what hazardous materials are, the risks associated with them at an incident and the potential outcomes associated with a HAZMAT emergency.
- 2) Recognize the presence of hazardous materials in an emergency situation.
- 3) Identify hazardous materials.
- 4) Understand the role of the individual trained to the first responder awareness level as well as the role of the DOT Emergency Response Guidebook.
- 5) Recognize the need for additional resources and advise the IC to make the appropriate notifications.
- 6) Basic hazard and risk assessments.
- 7) Select and use proper specialized chemical protective equipment.
- 8) Understand basic HAZMAT terms.
- 9) Basic and advanced control, containment and/or confinement operations within the capabilities of the resources and PPE available within the unit.
- 10) Understand and implement decontamination procedures.
- 11) Understand the relevant SOPs and termination procedures.
- 12) Implement an employers (business) emergency response plan.
- 13) Classify, identify and verify known and unknown materials using field survey instruments and equipment.
- 14) Function within an assigned role in the incident command system.
- 15) Understand basic chemical and toxicological terminology and behavior.
- 16) Understand HAZMAT medical management protocols as established by the California Emergency Medical Services Authority (EMSA).
- 17) Rescue/Evacuation.
- 18) Isolation/Deny entry.



- 19) Contain/Control.
- 20) Exposure protection.
- 21) Communicate with the IC, first responder agencies, dispatch centers and State and federal regulatory agencies.

### **III. BACKUP TEAMS**

A backup team **MUST** be provided as a rescue team for the personnel working in the hot zone. The backup team shall:

- 1) Be protected at the same level of protection as the team working in the hot zone.
- 2) Maintain line of sight contact among personnel operating in the hot zone.
- 3) Visually monitor personnel operating within the hot zone.

### **IV. RESPONSE TIMES**

- 1) Each HIRT provider will meet a maximum response time of sixty minutes for ninety percent of all hazardous materials incidents dispatched.
- 2) A second, simultaneous, response will require a maximum response time of ninety minutes.
- 3) Response time begins at the time of dispatch and ends when the unit arrives on scene.

### **VI. RELEASE FROM SCENE**

The following standardized criteria will be utilized by the Incident Commander in determining when to release HIRT Units from an emergency scene. These Guidelines are necessary to ensure the availability of HIRT resources for multiple or escalated HazMat emergencies in the San Diego Operational Area.

Although this guideline covers a variety of situations, there will be times when special circumstances may necessitate the release of HIRT resources. Common sense should be exercised in these instances. HIRT may be released from the scene:

- 1) Whenever the local jurisdiction has the ability to complete the incident plan in an approved, safe and acceptable manner.
- 2) When HIRT is notified of a second incident and it is determined that the local jurisdiction has the ability to carry out the incident plan in a safe and approved manner.
- 3) When the product or material does not pose a threat to people or the environment and can be isolated from the public.
- 4) Once the Incident Commander determines that the emergency phase of the operation and all entries into the exclusion zone are complete.

When the incident is above the capabilities of the local fire department hazardous materials teams, the HIRT unit(s) will be dispatched to the scene. Both organizations may be called out to respond simultaneously for larger incidents. Should the incident exceed the capabilities of the combined local resources, OES may request HIRT units from other counties in Southern California to be dispatched to the scene.

When HIRT is requested, they will investigate to determine the magnitude of the spill or release, the conditions and type of containers, if any, and the material involved. HIRT will attempt to locate the spiller/generator and/or property owner. If the material is suspected or found to be a CERCLA product or products, and the responsible party cannot be located or is taking inadequate action, the HIRT will initiate a request for State Super Funds. HIRT will also assist the Incident Commander OSC in coordinating proper containment and cleanup operations.

For larger scale incidents (those requiring a multi-agency response) the local response organizations will provide representatives to the Incident Commander/On-Scene Coordinator to assist with the coordinated response. These representatives will fill various positions in the ICS structure.

## **7200 Command Section**

**Reference section 2000 from this plan.**

### **7210 Command Structure: Unified Command**

**Reference section 2100 from this plan.**

### **7220 Command/Staff Elements: Roles & Responsibilities**

**Reference section 2200 from this plan.**

### **7230 Public Affairs**

One aspect of the ICS is the public affairs division. During recent incidents, inaccurate, and contradictory information has been released to the press by various agencies involved in the response. This resulted in significant problems as it caused undue panic/concern on the part of the public. It is imperative that all agencies participating in a response have a representative in this division and train their personnel to direct all press inquiries to these individuals.

## **7300 Operations Section**

**Reference section 3000 from this plan.**

### **7310 Operations Section Organization**

**Reference section 3100 from this plan.**

### **7320 Roles & Responsibilities**

**Reference section 3200 from this plan.**

### **7330 Reporting Requirements**

A release or threatened release of a hazardous material within the State of California must be reported. Hazardous material includes any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant or potential hazard to human health or safety or to the environment, if released. If there is any question as to whether the material poses a threat, a report should be made to the appropriate authorities.

An immediate verbal report of any release or threatened release of hazardous material must be made to:

- 1) The National Response Center at 1-800-424-8802.
- 2) The local emergency response agency (such as 911, or the fire or health department, as directed by local laws).
- 3) The Governor's Office of Emergency Services (OES) at 800-852-7550 or 916-262-1621.

This report should include:

- 1) Location of the release or the threatened release.
- 2) The name(s) of the person(s) reporting.
- 3) Hazardous material involved.
- 4) Estimates of the quantity.
- 5) Status of the release source (secured, still leaking, etc.).
- 6) Any known injuries.
- 7) Any actions taken or being taken to secure source and/or site.

### **7340 Initial Response Actions**

As stated in section 7150 of this plan, the United States Coast Guard Captain of the Port (COTP) FOR San Diego has been designated the local hazardous materials response team to be the initial responder to incidents in the coastal zone. The COTP will remain the OSC and make notifications to the NRC and assist in the coordination of response efforts, if required.

If the incident is beyond the capabilities of local responders, the COTP/OSC will exercise the ACP and will initiate the formation of the Incident Command System. Based upon the Memorandum of Agreement between the USCG COTP and the County of San Diego Hazardous Incident Response Team (HIRT), the OSC will request the Team's assistance. Should the incident be too large for these agencies to handle, the OSC will initiate a federal response.

At this time, OES will also be notified of the need for assistance and will start contacting other HazMat teams from other counties and request that they be dispatched to the scene to assist.

### **7350 Initiating A Federal HazMat Response**

In accordance with the Clean Water Act (CWA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) OF 1980, and the National Contingency Plan (NCP), the OSC/RPM has the authority to remove or arrange for the removal of releases and threatened releases of hazardous substances or pollutants/contaminants which may present an imminent and substantial endangerment to the public health or welfare. A federal response will only be initiated if the responsible party fails or refuses to take appropriate actions to abate the spill.

The OSC's determination of the appropriate extent of a federal removal is guided by considerations similar to those that apply to initiating a removal. As a general rule, the OSC should pursue a cleanup until all environmental and public health and welfare concerns have been addressed; that is, the magnitude of the harm posed by the release has been reduced to insignificant levels. Once the immediate threat has been eliminated, the OSC should turn the site over to the EPA for possible extended planned removal or remedial action.

### **7360 Response Actions**

The OSC shall evaluate the situation and ensure that the following issues are addressed:

- 1) The source of the release is secured.
- 2) The site is secured.
- 3) All non-essential personnel are evacuated from the scene.
- 4) Determine the properties of the spilled substance(s).
- 5) Ensure the responsible party has been notified and directed to take appropriate actions to contain/cleanup the hazardous materials in question.
- 6) Coordinate with state and local response agencies to complete a preliminary assessment and develop a situation specific response action plan.
- 7) For a situation requiring a federal response, open the CERCLA Fund (see section 7600) and commence documentation procedures.
- 8) Designate members of each branch/division of the ICS.
- 9) Continually evaluate the ongoing response actions to insure that they are adequate for the changing situation.
- 10) Once the immediate threat has been abated, ensure that a complete turnover to EPA is accomplished.
- 11) A site safety plan is implemented.

### **7370 Required Correspondence**

**Reference section 3400 from this plan.**

### **7375 Response Priorities**

**Reference section 3500 from this plan.**

**7380 Response Strategies**

**Reference section 3600 from this plan.**

**7400 Planning**

**7410 Planning Section Organization**

**Reference section 4100 from this plan.**

**7420 Roles & Responsibilities**

**Reference section 4200 from this plan.**

**7430 Compliance Guidance**

**Reference section 4300 from this plan.**

**7440 Response Priorities**

**Reference section 4400 from this plan.**

**7450 Response Strategies**

**Reference section 4500 from this plan.**

**7460 Environmental Sensitivity Information**

**Reference section 4600 from this plan.**

**7470 Scenario Development**

Two planning scenarios have been developed to describe typical actions for a specific incident. The scenarios described here were developed based upon the collective expertise of the San Diego Area Responders. These scenarios are only examples of possible incidents, and one method of responding to these incidents. Each actual spill/release must be evaluated based on the specific conditions at the time in determining which actions to take.

The given scenarios do not reflect the probability of any given organization/company causing a spill/release. These scenarios were chosen to create situations that would allow area responders to consider many factors that would need to be considered in a real event.

## **7475 Scenario I**

**LOCATION:** Southbound Interstate 5 at the Buena Vista Lagoon Overpass.

### **SCENARIO:**

A. At 0900 on a weekday, an acid trailer (MC 312 cargo tank) full loaded with 1500 gallons of 90% concentrated sulfuric acid swerves into a freeway guard rail at high speed. The trailer overturns on top of the Buena Vista Lagoon overpass. The trailer's man-way cover, located at the rear of the trailer, breaks open, allowing sulfuric acid to spill onto the highway, and down into the estuary, which is also a California State Ecological Reserve and continuing Wildlife Preservation Project.

- 1) AMOUNT SPILLED: 750 gallons (250 gallons reach the lagoon/water).
- 2) PRODUCT SPILLED: 90% concentrated Sulfuric Acid.

B. Winds are from the West at 5 kts, air temperature is 65 deg F, water temperature is 60 deg F, and the tide is slack high water.

C. Affected/potentially effected areas throughout the course of this scenario include:

- 1) Buena Vista Lagoon & Reserve
- 2) Pacific Ocean
- 3) The cities of Carlsbad/Oceanside/Vista

D. The required response action elements are presented in chronological sequence. These include initial actions, spill response organization, containment, countermeasures, cleanup strategies, resource requirements, and time necessary for initial reactions. The following response strategy for this scenario and estimated times are for planning purposes only and do not reflect performance standards.

### **DAY ONE**

#### **1) 0-2 Hours (0900-1100)**

The driver is unhurt and is able to exit the cab safely. She immediately retreats from the scene of the accident, as toxic fumes and a small gaseous plume, caused by the reaction of the acid as it hits the ground and the surface of the water, begins to affect the surrounding atmosphere. A passing motorist calls 911 from their cellular phone and reports the incident.

The dispatcher contacts the San Diego Fire Department, HIRT, and the US Coast Guard.

Resources/personnel are dispatched to the scene. The dispatcher also notifies the California Highway Patrol (CHP). The Carlsbad, Vista, and Oceanside Fire Departments are immediately notified. All three arrive on scene within the next 15 minutes.

The CHP officers arrive on scene. Traffic is stopped and rerouted in both directions, and the CHP assumes command of the incident. The area is secured and a Unified Command System is established. The US Coast Guard representative arrives on scene within 15 minutes. Cal-Trans crews, San Diego Fire HazMat team, and San Diego County Environmental Health arrive on scene within the next 25 minutes.

The HazMat Teams suit up in appropriate response gear, including SCBAs, and secure the source to ensure that no further material is released.

The sulfuric acid has already corroded the freeway asphalt, cement curbing, and metal guard posts on its way to the lagoon. As the acid reaches the water, it sinks and mixes violently with the water. This reaction produces a yellowish toxic cloud. This drifts in an easterly direction, hugging the earth's surface through the thick morning fog. The acid in the water begins to kill some of the exposed wildlife and surrounding vegetation.

The airborne plume threatens not only the initial safety zone, but also nearby neighborhoods. A major shopping mall and sewage disposal plant is located one mile east of the spill. Evacuation of these areas begins, and the safety zone perimeter is enlarged.

The HazMat Teams begin to neutralize the landside using soda ash. The on-scene fire departments initiate a fog/water "curtain" to knock down the gas cloud, while being cautious not to introduce water to the tank truck directly, or the acid on the ground.

Construction of a sand berm is discussed to keep the acid from washing out into the Pacific Ocean. Due to the lack of significant water movement in the lagoon and the greater potential for damage to the environment, it is decided that this will be put on hold for the time being.

Media interest is high and news crews begin to arrive on-scene.

## **2) 2-4 Hours (1100-1300)**

The bulk of the acid spilled on land is neutralized. Air sampling equipment is deployed to check the "downwind" air concentrations. Water sampling is started to ensure that the acid is neutralized.

A press release is issued and a press conference is held to get the information out to the public.

Wildlife impact assessment commences with representatives from the California Department of Fish & Game (DFG).

## **3) 4 Hours through end**

Air sampling and water sampling continue until it is determined that the acid is completely diluted and that the toxic cloud has dispersed and no longer poses a threat to the public.

Wildlife impact assessments will continue in order to evaluate the overall effect of the spill.

## **7480 - Scenario II**

**LOCATION:** Harbor Drive Chevron Facility's Lower Tank Farm/San Diego Bay

### **SCENARIO:**

A. On a Wednesday at 12:30 p.m., an earthquake, with a magnitude of 5.2, occurs in San Diego. The lower tank farm at the Harbor Drive Chevron Facility experiences a complete failure of tanks 27 and 28. The tanks were full at the time and 39,778 barrels of unleaded gasoline were released.

The quake destroys part of the containment wall separating the tank farm from Southwest Marine. The containment wall, designated to hold 29,781 barrels (110% of the largest tank), is damaged but still retains 22,336 bbls of the premium unleaded gasoline released when the tank collapsed.

The remaining 17,442 bbls (732,564 gallons) pours over the damaged containment wall onto the Southwest Marine shipyard and into San Diego Bay.

At the time of the earthquake, the area shipyards (NASSCO, Southwest Marine, and Continental Maritime) were in full operation including hot work.

1) AMOUNT SPILLED: 732,564 gallons

2) TYPE OF OIL: Unleaded and Premium Unleaded Gasoline

B. It is summer, with clear skies, the air temperature is 80 deg F, and the water temperature is 65 deg F, with winds from the West at 5 knots. There is a flood tide with a current of 2 knots under the Coronado Bay Bridge.

C. Affected/potentially effected areas throughout the course of this scenario include:

- 1) North San Diego Bay
- 2) South San Diego Bay
- 3) Glorietta Bay and the Silver Strand/Coronado Cays
- 4) Chula Vista Boat Basin
- 5) Sweetwater River and Chula Vista Nature Preserve
- 6) Otay River
- 7) A-8 Anchorage (live-aboards & vessels)
- 8) Cities of Imperial Beach, San Diego, Chula Vista, and National City
- 9) NASSCO, Southwest Marine, and Continental Maritime shipyards
- 10) 32<sup>nd</sup> Street Naval Station and Naval Amphibious Base

D. The following strategic objectives were developed during the response planning:

- 1) Search & Rescue
- 2) Fire/spill containment and protection strategies
- 3) Fire extinguishing
- 4) Crowd/traffic control (vehicles, air space, trains, etc.)
- 5) Local area evacuations & public notifications (in “downwind” areas)
- 6) Hazardous waste disposal
- 7) Natural resource damage assessments (short & long term)

E. The following specific response action elements are presented in chronological sequence. These include all of the specific tasks necessary to accomplish the strategic objectives outlined above. The following response strategy for this scenario and estimated times are for planning purposes only and do not reflect performance standards.

## **DAY ONE**

1240 USCG MSO receives the report of the spill and resulting fire from Chevron personnel.

1245 USCG MSO COTP assumes the role of OSC and opens the Oil Spill Liability Trust Fund. ODP receives notification of spill from HMMD.



1250 OSC closes Port of San Diego/San Diego Bay to all traffic and issues a Broadcast Notice to Mariners. FAA is contacted and the air space for a radius of 2 miles is closed to all non-response air traffic. ODP begins notification and EOC activation process.

1255 First San Diego Fire Department units arrive on-scene and commence laying out cooling and protection hose lines. 2 Harbor Police vessels arrive on-scene and commence using 1500 GPM water monitors to help contain the waterside fire. 2 USCG patrol boats arrive on-scene. One vessel commences SAR operations north of the scene between the Coronado Bay Bridge and the incident. The second vessel commences SAR operations south of the incident.

1300 2 USCG helicopters are launched enroute to the scene to perform landside and waterside SAR operations. Operational Area Emergency Operations Center (EOC) activated. Media Team activated. Some Media Team assets put at disposal of Unified Command.

1310 ODP recommends to City of San Diego that they proclaim a local emergency/request the Governor proclaims a State of Emergency. ODP begins process of proclaiming a local emergency/requesting the Governor proclaim a State of Emergency for the operational area.

1315 OSC requests 2 Navy and 2 Navy contract tugs (from 32<sup>nd</sup> Street Naval Station) are dispatched to the scene. OSC also requests that the 32<sup>nd</sup> Street Naval Station ORT deploy boom from the pier, one at the Naval Station out 4000' to contain the spread of oil on the flood tide. OSC/IC requests ODP activate LIFE/EAS. Messages go out regarding evacuation in the immediate area of the spill/fire.

1320 OP Area EOC contacts Red Cross and requests they establish shelters for potential evacuation of the impacted area.

4 Navy tugs arrive on-scene and commence using their 3000 GPM to control the waterside fire and contain/extinguish the shoreside fire. EOC dispatches representatives to the UCS. Op Area EOC ready to provide support to responding agencies. San Diego County Animal Control units arrive on-scene to support Fish & Game in wildlife protection/rescue.

1335 Op Area EOC requests helicopter support from NAS North Island in response to request from OSC/IC.

1350 Op Area EOC representatives arrive at Command Post and report to the Liaison Officer.

1400 San Diego Fire continues to provide exposure protection with an awareness to avoid depositing the fire streams into the burning fuel. Cooling fog is directed to cool other tanks in the containment area.

1415 OSC requests that the 32<sup>nd</sup> Street Naval Station Fire Department dispatch all available AFFF to the scene. AFFF supplies are collected and inventoried in the upper yard area at the Chevron Facility. EOC Staff Briefings.

1430 County Chief Administrative Officer (CAO) delegates Local Agency Representative authority to Director, Office of Disaster Preparedness.

1500 Waterside resources have extinguished the waterside fire and the shoreside structure fires with the exception of the tank farm involved. These resources are directed to continue providing structure protection on the bay side of the tank farm to keep the fire from spreading from the tank farm containment area.

1530 With the waterside fire extinguished the OSC requests that the Navy ORT and Foss Maritime coordinate resources to deploy boom to enclose the spill area and contain any oil that may move when the tide shifts.

1600 Sufficient quantities of foam have been assembled in the upper yard area at the Chevron facility. The OSC and San Diego Fire decide to strategically position foam supplies and commence fire suppression application of AFFF.

1630 Due to the natural evaporation, only 38% of the original spill volume remain floating on the water. With current wind conditions, the majority of the remaining spill is held along the shoreline. Due to this rapid evaporation, product properties, and ongoing fire fighting efforts, the OSC decides to let the spill evaporate instead of attempting mechanical clean-up operations (which would put cleanup personnel at risk for limited benefit).

1800 San Diego Fire extinguishes fire in tank farm containment area. Teams continue to apply AFFF to maintain the vapor suppressing foam blanket. Other teams continue to direct water streams at the containment walls to cool the product remaining in the containment area. These teams are conscious not to allow cooling streams to hit the AFFF blanket inside the containment.

2000 The product remaining in the containment area is cooled to a point where it can be safely pumped from the containment area into tank trucks which are standing by. Product in other "uninvolved" tank is also removed using installed pumps and piping (to tanks in the upper tank farm).

2330 Product removal from containment area is complete.

## **Day 2 to End**

Product remaining in the water would remain boomed and allowed to evaporate. This process would take approximately one additional day according to the NOAA Modeling for this incident.

The California Department of Fish & Game would complete Natural Resource Damage Assessments. A short-term field monitoring of water quality impacts would be conducted utilizing water monitoring capability of San Diego Sanitation District and commercial environmental consultants (Days 1-14). This short-term monitoring would be followed by long-term biological impact studies using San Diego State University and commercial environmental consultants to develop and carry out a monitoring plan (Days 7-as necessary).

## **7500 Logistics**

### **7510 Logistics Section Organization**

**Reference section 5100 from this plan**

### **7520 Roles & Responsibilities**

**Reference section 5200 from this plan**

### **7530 Communications**

**Reference section 5300 from this plan**

### **7540 Area Resources: Response Equipment**

**Reference section 5400 from this plan**

### **7550 Area Resources: Personnel & Services**

**Reference section 5500 from this plan**

**7555 Natural Resource Trustees**

The OSC should notify the appropriate land managing agencies or trustees of natural resources whenever there is any indication of resources potentially being affected by a hazardous substance release. These individuals can give the OSC valuable information about natural resources to be impacted in the area and any special seasonal concerns that the OSC should be aware of when initiating the response.

List of land managing agencies/trustees and owners/operators for the environmentally sensitive, economically significant, and historical & culturally significant sites are listed on each site description in section 7400 of this plan.

**7600 Finance/Administration**

**7610 Finance Section Organization**

**Reference section 6100 from this plan**

**7620 Roles & Responsibilities**

**Reference section 6200 from this plan**

**7630 FOSC Access to Funds**

Local and State agencies will use allocated, individual agency funds to respond to a hazardous materials incident until/if it becomes necessary for the Federal OSC to initiate/assume control of the response efforts. At this point, the OSC would contact the USCG District Operations Center (510-437-3700) and request to open the CERCLA account. The OSC should provide an estimate of the response costs when submitting the request for the appropriate accounting data. The OSC may obligate up to \$25,000 for removal costs (including vendor costs and out-of-pocket costs reimbursable to the Federal/State agencies) without prior approval from the district commander or the EPA. The district commander may authorize amounts in excess of the OSC's limits, up to \$250,000, without prior EPA approval. Requests for authority to obligate CERCLA Funds over \$250,000 must be made to the Emergency Response Division, EPA Headquarters via the USCG National Pollution Fund Center. The USCG is limited to \$1,000,000 to conduct the immediate mitigation of an incident. If the incident will require more than this amount, the EPA will assume the role of the OSC and complete the response/cleanup activities. Local and State agencies participating in the response would be required to enter into agreements with the OSC which state their response activities to be carried out and their total amount of CERCLA money they are authorized to spend to complete the tasks outlined. The agency representative to the ICS and the OSC or his/her designated representative will sign these agreements.

**7640 Other Access to Funds**

**Reference section 6400 from this plan**

**7650 Cost Recovery/Documentation**

**Reference section 6500 from this plan**